

**To:** Sam Werner[Sam.E.Werner@usace.army.mil]  
**From:** Schaller, Andrea  
**Sent:** Thur 6/25/2015 5:24:52 PM  
**Subject:** Sunrise Coal, LRL 2007-791, PCN NWP 50

Sam,

EPA has reviewed the Sunrise Coal Cardinal Mine in Carlisle, IN, Corps project LRL-2007-791. While this application exceeds the 300 foot loss of stream bed limit within the NWP 50 and seeks authorization for 1,765 linear feet of impacts to an unnamed tributary, the District Engineer can waive this limit if impacts only result in minimal adverse effects. Given that the impacts all stem from the relocation of an intermittent tributary, EPA does not object to the use of the NWP if the relocated channel is built and stable prior to diverting the existing flows into the new channel, as is the applicant's stated intent. However, in order to further ensure that there is minimal adverse effects as required by the NWP 50 for this waiver the EPA makes the following recommendations.

-The length of the proposed crossing should not be counted in the length of mitigated stream. A fording site is not acceptable stream mitigation. This point was also made in one of IDEM's letters to Sunrise Coal.

#### -Stream Design

EPA was not provided baseline data forms or photos with the PCN; however, the RBP scores did indicate a lower quality stream that was entrenched with stability issues, as described in the report. The agency is still concerned about the applicant's self-prescribed "areal" limitations of the design. Their design limits the success and ecological benefits possible by restricting the size and accessibility of the mitigated stream to its floodplain. Further, the applicant stated that the stream's "footprint had to be minimized, the 100-year flood event cannot expand onto a constructed floodplain." Also EPA recommends that the limits of the floodplain be identified to ensure that the coal storage pile does not fall within the floodplain as this could have negative effects on the water quality of the mitigated stream and will affect the mitigation area reaching its performance goals.

#### -Performance Standards

The success criteria proposed by Sunrise Coal are not linked to any measurable standard such as RBP scores, survivability of buffer plantings, invasive species coverage, etc. These performance standards should be updated to include objective and verifiable metrics.

#### -Adaptive Management

It was also noted that the applicant did not identify any potential challenges yet the applicant's proposed design limits the footprint of the stream and thereby cannot employ natural stream design. Further, they have no substantive adaptive management plan, except a statement that if there is an issue they will correct it. Their design inherently has potential challenges based on the limits placed on the stream. As such, their adaptive management plan should minimally address those areas.

#### -Financial Assurances

Lastly, EPA points out the applicant's lack of financial assurances. There are several mitigation projects that have been authorized without the Corps requiring financial assurances that have unfortunately not been able to be completed by the applicants that sponsored them. Sunrise Coal stated "[t]he company takes full responsibility for the continued maintenance of the mitigation site. The company has an annual budget for remedial work at any of their restoration sites, and these sites would fall within that budget." As such, EPA recommends that a performance bond, escrow account, casualty insurance, or letter of credit be required in the amount of the budget necessary to construct, maintain, and monitor this site for a minimum of five years.

Thank you for the opportunity to comment on this PCN, let me know if you have any questions.

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